

**Monday 8 March**

- 08 h 00** Welcome / Poster installation / Registration
- 09 h 00** **Opening Ceremony**
- 10 h 30** **Break**
- 11 h 00** **Plenary lecture**  
**The importance of Engineering for Competitiveness in the Food Industry.**  
Prof. Werner Bauer, Nestlé S.A., Executive Vice President, Technical, Production and R&D,  
Vevey, Switzerland
- 11 h 45** **Plenary lecture**  
**Designing Food Processing Systems for Long-Duration Space Explorations.**  
Prof. R. Paul Singh - University Davis, USA
- 12 h 30** **Lunch**
- 14 h 00** **Plenary lecture**  
**Emerging Technologies: Challenges and Opportunities.**  
Prof. D. Knorr, Berlin University of Technology, Germany
- 15 h 00** **Other Parallel Oral Sessions**
- 16 h 40** **Break**
- 17 h 10** ***Coating and encapsulation***
- 17 h 10** 379  
Microencapsulation of a water-soluble natural blue pigment.  
Thomas O., Mathieu E., Calderone M., Carnelle G., Jaouen P., Lépine B.
- 17 h 30** 798  
Oil encapsulation by spray drying and fluid bed agglomeration.  
Turchiuli C., Fuchs M., Bohin M., Cuvelier M.E., Ordonnaud C., Peyrat-Maillard M.N., Dumoulin E.
- 17 h 50** 899  
Origanum virens L. flavor encapsulation in a spray dried starch matrix.  
Ribeiro C., Beirão-da-Costa M.L., Moldão-Martins M.
- 18 h 10** 918  
Physical properties of starch-based edible films plasticized with binary polyol mixtures.  
Talja R.A., Helén H., Roos Y.H., Jouppila K.
- 18 h 30** End of the Day

## Tuesday 9 March

- 08 h 30**      **Plenary lecture**  
**Food Process Engineering for the purpose of tailored microstructure, rheology and related product characteristics**  
 Prof. Dr.-Ing. Erich J. Windhab - Swiss Federal Institute of Technology, Zurich, Switzerland
- 09 h 20**      **Presentation of ISFE**  
**G. Barbosa Canovas**
- 09 h 30**      **Other Parallel Oral Sessions**
- 09 h 30**      ***Poster session: Coating and encapsulation***
- 303  
 Effect of light and temperature on the stability of a microencapsulated paprika oleoresin.  
 Santos A.B., Fávoro-Trindade C.S., Grosso C.R.F.
- 304  
 Spray drying microencapsulation of paprika oleoresin.  
 Santos A.B., Fávoro-Trindade C.S., Grosso C.R.F.
- 574  
 Molecular nanoencapsules for protection and controlled release of unsaturated fatty acids.  
 Lalush I., Shimoni E.
- 575  
 Near-field characterization of polygalacturonate-coated surfaces.  
 Zakharia I., Kesselman E., Shimoni E.
- 618  
 Coating chocolate: characterization and stability prevision.  
 Di Matteo M., Albanese D., Russo L., Cinquanta L., Del Vaglio M.
- 725  
 Microencapsulation of l-menthol by spray drying.  
 Soottitawat A., Takayama K., Okamura K., Muranaka D., Yoshii H., Furuta T., Ohkawara M., Linko P.
- 855  
 Effect of coatings of hydroxypropyl methylcellulose-surfactants on colour of carrot slices.  
 Villalobos R., Peinado S., Talens P., Chiralt A.
- 856  
 Gloss and surface roughness of edible films made with hydroxypropyl methylcellulose and surfactants.  
 Villalobos R., Chanona P.J.J., Gutiérrez L.G.F., Chiralt A.
- 861  
 Effect of hydroxypropyl methylcellulose on properties of Candelilla coatings.  
 Llovera A., Romay A., Ortola M.D., Fito P., Chiralt A.
- 919  
 Release of encapsulated ethyl acetate from amorphous maltodextrin.  
 Sundberg S., Kälviäinen S., Miettinen S.M., Jouppila K., Hyvönen L.
- 10 h 50**      **Break**
- 11 h 20**      ***Storage and preservation of foods***
- 11 h 20**      759  
 Design and performances of a constant temperature (-1.5 °C) compartment for domestic refrigerators.  
 Maltini E., Cortella G., Stecchini M., Del Torre M., Pittia P., Spaziani M., Mansutti G.
- 11 h 50**      787  
 Development of User-friendly software for design of modified atmosphere packaging for fresh and fresh-cut produce.

Mahajan P.V., Oliveira F.A.R., Montanez J.C., Frias J.

**12 h 10**

927

Loss of quality in functional orange juice drinks during storage and distribution.

Jova L., Oliveira J.C.

**12 h 30**

**Lunch**

**14 h 00**

**Plenary lecture**

**Computers and processes engineering in food manufacturing : promises, challenges and realities. A subjective point of view**

P. Escure, P. Cornillon, A. Genovesi, A. Pajonk - Danone Vitapole, Palaiseau, France

**15 h 00**

**Other Parallel Oral Sessions**

**15 h 00**

***Poster session: Storage and preservation of foods***

441

Prevention of hydrolytic rancidity in rice bran .

Silva M.A., Sanches C., Amante E.R.

611

Silo storage of raisins.

Kostaropoulos A.E., Saravacos G.D.

657

Microbiological and colour changes in umbu (*Spondias Tuberosa* Arr. Cam.) in the mature green stage, during storage under accelerated conditions.

Borges S.V., Jorge E. da C., Amorim E., Luchese R.H., Cavalcanti N. de B.

658

Sensory alterations in green umbu (*Spondias Tuberosa* Arr. Cam.) marmalade-like during storage.

Borges S.V., Policarpo V.M.N., Deliza R., Castro F.T.

745

Changes in gloss and colour of dark chocolate as affected by storage temperature.

Pastor C., Santamaría J., Chiralt A., Aguilera J.M.

862

Development of concentration profiles during storage of osmodehydrated apple slices.

Atarés L., González-Martínez C., Chiralt A.

868

Study of different storage conditions in volatile production in citrus fruits inoculated with *Penicillium digitatum* Saccardo and *Penicillium italicum* Wehmer.

Stern Freifeld D., Ortola M.D., Fito P.

950

Effect of natural antibrowning agents on the color of fresh-cut apples.

Rojas-Graü M.A., Sobrino-López A., Mateu-Fornos N., Martín-Belloso O.

**16 h 50**

**Break**

**17 h 10**

**Other Parallel Oral Sessions**

**18 h 50**

End of the day

**21 h 00**

**Concert for Voices and Organ**

**Wednesday 10 March**

- 08 h 30**      **Plenary lecture**  
**Active packaging for food processing and preservation**  
 Prof. Nathalie Gontard, professor, Montpellier University II, France
- 09 h 30**      **Other Parallel Oral Sessions**
- 10 h 50**      **Break**
- 11 h 20**      **Other Parallel Oral Sessions**
- 12 h 20**      **Lunch**
- 14 h 00**      **Plenary lecture**  
**Predictive microbiology of foods: past, present and future.**  
 Prof. Jan van Impe, University of Louvain, Belgium
- 15h 00**      **Other Parallel Oral Sessions**
- 15h 00**      ***Poster Session: Packaging - MAP - Edible films***
- 167  
 Raspberry packaging in high oxygen atmosphere with equilibrium modified atmosphere.  
 Jacxsens L., Cruz L., Siro I., Devlieghere F., Debevere J.
- 250  
 Thermo-mechanical properties of sodium caseinate films: effect of type and plasticizer content.  
 Pérez-Pérez C., Desobry S., Guilbert S., Micard V., Redl A., Hardy J.
- 275  
 Manufacture of calcium alginate films of low solubility.  
 Zactiti E.M., Kieckbusch T.G.
- 306  
 Fatty acid addition to improve water vapor barrier of edible films made from *Amaranthus cruentus* flour.  
 Colla E., Sobral P.J.A., Menegalli F.C.
- 321  
 Antimicrobial edible and/or biodegradable packaging : controlling mass transfer and activity.  
 Ben Arfa A., Belloy L., Chalier P., Gontard N.
- 336  
 Effect of lipid on structure, water vapor permeability and mechanical properties of amaranth flour films.  
 Tapia D.B., Sobral P.J.A., Menegalli F.C.
- 509  
 Use of edible coatings and films in apple pieces cold preservation.  
 Tasios L., Tzia C.
- 526  
 Evaluation of an active package containing oregano as antimicrobial agent .  
 Morales-Castro J., Robles C., Gallegos-Infante J.A., Villalpando-Olmos J., Hotchkiss J.
- 563  
 Quality of fresh rabbit meat stored under vacuum and 100% CO<sub>2</sub> atmosphere.  
 Rodríguez-Calleja J.M., García-López M.L., Otero A., Santos J.
- 620  
 Active packaging of fish products.  
 Albanese D., Cinquanta L., Di matteo M.

640

Estimation of consumer exposure to substances from food plastic packaging materials: a quantitative methodology based on probabilistic modeling of migration and consumer purchases.  
Vitrac O., Challe B., Feigenbaum A.

645

Effect of using PET packaging on the quality of an orange juice made from concentrate.  
Berlinet C., Ducruet V., Brat P., Brillouet J-M., Reynes M., Guichard E.

670

The effect of moisture on the strength of corrugated cardboard packaging.  
Nevins A.L., Bronlund J.E., Mawson A.J., Chalmers I.R., McKenzie A.D.

755

Prediction of water permeability of flexible multilayer films intended for food packaging applications.  
Buonocore G.G., Dainelli D., Del Nobile M.A.

780

Influence the fatty acid in the properties of the gelatin and triacetin biofilms.  
Bertan L.C., Tanada-palmu P.S., Siani A.C., Grosso C.R.F.

782

Chemical lipophilization of wheat gluten and its effect on the properties of edible films.  
Tanada-Palmu P.S., Pilli R.A., Grosso C.R.F.

785

Analysis of the effect of temperature on gas exchange in packed perforation-mediated modified atmosphere packaging.  
Montanez J.C., Oliveira F.A.R., Saleiro R., Frias J.

786

Influence of low O<sub>2</sub> and high CO<sub>2</sub> on the respiration rate of shredded carrots at different temperatures.  
Iqbal T., Oliveira F.A.R., Quintas R., Kerry J.

820

Viscoelastic and thermal properties of edible films based on Tilapia muscle proteins.  
Santos J.S., Garcia F.T., Sobral P.J.A., Habitante A.M.Q.B., Monterrey-Quintero E.S.

828

Effect of cysteine on functional properties of gliadin films.  
Hernández-Muñoz P., Chiralt A.

845

Establishment of process conditions for antimicrobial active edible films with nisin from sorghum.  
Schause A., Rojas de Gante C.

902

Mechanical properties and water solubility of crosslinked sodium caseinate films plasticized with triethanolamine.  
Audic J.L., Chaufer B.

983

Cellulose-based edible films incorporated with propolis as active packaging.  
Kim C.T., Kim C.J., Cho Y.J., Chun B.Y., Choi A.J., Lee S.J.

984

Preparation of fruit gel by thermal gelation process and its rheological characteristics.  
Kim C.T., Kim C.J., Cho Y.J., Jee H.K., Choi A.J., Chun B.Y., Lee S.J.

986

Physical properties of polysaccharide-coated polypropylene films as affected by biopolymer and plasticizer types.  
Hong S.I., Lee J.W., Son S.M.

16 h 40

**Break**

17 h 20

***Edible films properties and engineering***

17 h 20

294

Application of edible coatings of gelatin and fatty acids in the preservation of fresh guavas (*Psidium guajava* L.).

- 17 h 40** Fakhouri M.F., Grosso C.R.F.  
633  
Influence of film-forming technique on moisture barrier performance of lipid films.  
Guillard V., Broyart B., Bonazzi C., Guilbert S., Gontard N.
- 18 h 00** 756  
Characterization of edible coating intended for food packaging applications.  
Conte A., Buonocore G.G., Nicolais L., La Notte E., Del Nobile M.A.
- 18 h 20** 973  
Developing antimicrobial packaging system: principles and case study - Lethality of Escherichia coli O157:H7 in packaged ground beef.  
Han J.H.; Nadarajah D., Holley R.A.
- 18 h 40** End of the day
- 19 h 00** **Gala Dinner**

**Thursday 11 March**

- 08 h 30**      **Plenary lecture**  
**Food Engineering and Processing in Southern Africa - A Double Agenda**  
Andrew Murray, Consulting Food Processes and Projects Engineer, South Africa
- 09 h 30**      *Modified Atmosphere packaging*
- 09 h 30**      108  
Modeling of active modified atmosphere packaging of fresh fruits and vegetables containing oxygen absorbers.  
Charles F., Gontard N.
- 09 h 50**      277  
Effects of light energy on juices packaged in polyester bottles.  
Conrad K.R., Davidson V.J., Britt I.J., Mulholland L.
- 10 h 10**      784  
Effect of gas composition on the gas exchange rate in packed perforation-mediated modified atmosphere packages.  
Montanez J.C., Oliveira F.A.R., Saleiro R., Frias J.
- 10 h 30**      898  
Studying and modeling the controlled release of different active compounds from antimicrobial films intended for food packaging applications.  
Buonocore G.G., Corbo M.R., Nicolais L., Del Nobile M.A.
- 10 h 50**      **Break**
- 11 h 25**      **Concluding remarks**  
Prof. Helmar Schubert, Karlsruhe University, Germany  
Scientific President of the Congress
- 12 h 30**      **Lunch**
- 14 h 00**      **Laboratories and Industrials Visites (Technical Tours)**